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ABSTRACT

A study determined labor market needs of high technology firms in Colorado. It assessed such needs in relation to present and projected output of vocational education and training programs and developed recommendations for policies and programs to meet industry training needs at the vocational training level. Data were collected through on-site and telephone interviews. Training needs were documented by first focusing on actual recent hires and then asking firm representatives to project needs for the same job titles over the next one- to three-year period. A great need for engineering technicians and assemblers was projected. Sources of employees projected to be hired were (from greatest to least) other Colorado firms, out of state firms, graduates from vocational education schools, four-year-college graduates, and on-the-job training and classroom training. High technology firms offered recommendations regarding basic skills, technical skills, job skills, cooperative and internship programs, clerical programs, industrial process control, cable technology, computer literacy, computer-assisted design and manufacturing, telecommunications, robotics, biomedical technology, entrepreneurship training, and aerospace. Suggested development actions included establishing (1) high technology training centers, (2) consistency between similar training programs throughout the state, and (3) high quality internship and cooperative job experiences. (The survey is appended.) (YLB)

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AN ASSESSMENT AND PROJECTION OF NEEDED HIGH TECHNOLOGY TRAINING PROGRAMS IN COLORADO

- EXECUTIVE SUMMARY -

Prepared by

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Prepared for the

Colorado State Board for Community Colleges
and Occupational Education

Mr. Leonard Hergenreter, Director Occupational Education

November, 1984

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STATE BOARD FOR COMMUNITY COLLEGES

AND OCCUPATIONAL EDUCATION

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4th Congressional District
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Dr. Elinor Greenberg, Vice Chair
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3rd Congressional District
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Representing Labor

Mr. Raymond "Buz" Wilder
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Private Occupational Schools

Vacant
6th Congressional District

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ACKNOWLEDGEMENTS

The conduct of this study depended upon the cooperative efforts of many persons. Everyone involved worked hard to produce the maximum amount of useable data about high technology firm needs which could be gathered with the fiscal and personnel resources available. The project served both the information needs of the State Board for Community Colleges and Occupational Education (SBCCOE) and the Governor's High Tech Cabinet Council. Information to serve both needs was collected through the same series of on-site interviews. We thank Mr. Randy Harrison, Director of Planning, State Office of Planning and Budget, Ms. Lesley Nearman, OSPB and Mr. Leonard Hergenreter, Director, Occupational Education, for engineering our cooperative efforts and providing a cooperative vision for our work.

We are grateful for the support we obtained from Mr. Richard Zimpel of the SBCCOE early in the project and the assistance of Mr. Bob Wilmoth who served as the project's monitor in the latter stages of its completion. Mr. Alan Magnuson, a loaned executive from Mountain Bell Telephone Company, conducted interviews and shared his knowledge of private sector operations. Alan was a valuable member of the project team.

We also thank the Research Committee of the High Tech Cabinet Council, particularly Dr. Robert McGowan, Denver University School of Business Administration, for their advisory role, critique of our survey forms and insights on the data needed to be collected.

The high technology firm data and analysis are available as part of a separate data base which is being compiled by the staff of the High Tech Cabinet Council. Only specific data pertaining to training needs are presented in this report. We hope that the data collected through this project can be used effectively in planning for high technology development in Colorado.

Mary Ward
Warren Wolff
August, 1984

I. INTRODUCTION

Colorado is rapidly becoming acknowledged as a leading center for development of high technology business engaged in microelectronics, aerospace, biotechnology, telecommunications and materials sciences. Intense competition with other possible sites for development of high technology enterprises make it imperative that incentives are available, such as favorable tax bases, outstanding research facilities, perceived high quality of life and the existence of a well-trained labor force. The Colorado Advanced Technology Institute (CATI) was created to enhance Colorado's position in competition with other locations for high technology businesses.

This report focuses on one of the key drawing points for high technology firms - the availability of a well-trained labor force. The report also discusses the role of CATI vis-a-vis the preparation of a trained workforce to support advanced technology business applications.

The SBCCOE commissioned this study to determine the types and numbers of workers currently needed and projected to be needed by high technology firms. Their funding of this study was based upon the premise that a knowledge of the training needs of high technology is essential to the formulation of a plan for state vocational education which is not only responsive, but anticipatory, of industry needs.

The SBCCOE joined with Governor Lamm's High Technology Cabinet Council in conducting this research as one thrust of several in a program to determine the most appropriate allocation

of scarce state and industry resources in the development of a productive high technology business climate for Colorado.

II. OBJECTIVES

Objectives of the study were to:

* Develop an understanding and concensus on the definition of high technology industries in Colorado.

* Determine labor market needs of firms in industries defined as being engaged in "high technology" business.

* Assess such needs in relation to present and projected output of vocational education and training programs in the state.

* Develop recommendations for policies and programs which meet the training needs of high technology industries in Colorado at the vocational training level.

III. METHODOLOGY

This study was designed to assess the need for training programs to support high technology firms in Colorado. Agreement was reached on a consensus listing of high technology industries in Colorado from which a stratified random sample of firms determined to be engaged in high technology was drawn. Appendix A contains the High Technology Standard Industrial Codes (SIC's) for Colorado.

One hundred and twenty-seven (127) on-site interviews and nine (9) telephone interivews were conducted using a structured interview protocal (see appendix A) designed by the contractor and a research advisory committee. The sample represented sixteen (16) percent of the total high technology firms classified under the SIC's agreed upon as representing potential high technology business activity in Colorado. The sample stratification consisted of firms with sizes from small (1-24 employees), medium (25-100) and large (over 100). Interviews,

conducted with CEO's, financial managers, or human resource managers ranged in duration from 30 minutes to over 2 hours with an average duration of one hour. All interview data were coded to guard against unauthorized disclosure of firm specific information.

IV. TRAINING NEEDS OF HIGH TECHNOLOGY FIRMS

Training needs were documented by focusing on actual recent hires (i.e. over the past six month period) and then asking firm representatives to project needs for the same job titles over the next one to three year period. In addition, firm representatives were asked to separate their responses into needs for vocationally trained personnel and those requiring four-year college education. After discussing actual new hires and projections for the future, firm representatives were asked to quantify the sources of trained workers. Each of these categories is provided below with a table documenting the numbers obtained.

Current and Projected Vocationally Trained Workers

Respondents were asked to disclose the number of vocationally trained employees hired during the last six months by job title. This information was compiled by Standard Occupational Classification (SOC) codes as shown in Table 1. This table empirically documents the great need for engineering technicians and assemblers by high tech firms in Colorado. These two occupational groups account for 2,108 of the total 2,652 (80%). It is interesting that clerical occupations is the third largest area of need with 290 (11%). Table 1 also provides

information on employment requirements during the next 1-3 years. Respondents saw a need for 2,378 assemblers representing 36% of the total needs, 2,006 engineering technicians (30%) , and 1,408 clerical workers representing 21% of the total.

TABLE 1

VOCATIONALLY TRAINED EMPLOYEES HIRED DURING THE LAST 6 MONTHS AND PROJECTIONS FOR THE NEXT 1 TO 3 YEARS

TITLE	OCC. CODE	6 MO.	1-3 YRS.
ACCOUNTANTS & AUDITORS	1412	3	7
PURCHASING AGENTS & BUYERS	144	5	8
ENGINEERS, N.E.C.	1639	130	83
ELECTRICAL ENGINEERING TECH.	3711	1074	812
MECHANICAL ENGINEERING TECH.	3713	39	100
ENGINEERING TECHS,N.E.C.	3719	33	146
DRAFTERS	372X	1	24
ENGINEERING & RELATED TECHN.	37XX	200	865
PROGRAMMERS	397X	14	131
SALES AGENT,BUSINESS SERVICE	4152	65	32
SALES REPRESENTATIVE, CABLE	4369	27	187
SUPERVISORS INFORM.CLERKS	4514	8	19
SECRETARIES,STENOS & TYPISTS	462X	281	1386
BOOKEEPING & ACCNT CLERKS	4712	3	12
SHIPPING & RECEIVING CLERKS	4753	1	3
AIRCRAFT MECHANICS	6116	21	25
MECHANICS & REPAIRERS	61XX	18	78
CONSTRUCTION TRADES	64XX	1	4
PRECISION ASSEMBLERS	6812	3	3
MACHINISTS	6813	60	138
PRECISION INSPECTORS	6881	8	82
MACHINE OPERATOR,GENERAL	7679	8	28
ASSEMBLERS	772X	629	2378
PRODUCTION INSPECTORS,CHECKE	782X	20	49
** TOTALS **		2652	6600

Table 2 shows the number of employees hired during the last 6 months and projected to be hired during the next 1-3 years for occupations requiring four year college training. Engineers are

by far the largest group with 1,756 hired during the last 6 months (53% of the total) and 5,814 (50% of the total) projected during the next 1-3 years.

TABLE 2

FOUR YEAR COLLEGE TRAINED EMPLOYEES
HIRED DURING THE LAST 6 MONTHS
AND PROJECTED FOR THE NEXT 1 TO 3 YEARS

TITLE	OCC. CODE	6 MO.	1-3 YRS.
HUMAN RESOURCES PROGRAM ADM.	1132	14	61
ACCOUNTANTS & AUDITORS	1412	23	143
PURCHASING AGENTS & BUYERS	144	22	110
AEROSPACE ENGINEERS	1622	7	19
CHEMICAL ENGINEERS	1626	2	4
ELECTRICAL & ELECTRONIC ENGI	1633	558	1912
PRODUCTION ENGINEERS	1634	37	70
MECHANICAL ENGINEERS	1635	153	448
SYSTEMS ENGINEERS	1636	852	2487
ENGINEERS, N.E.C.	1639	147	897
COMPUTER SCIENTISTS, N.E.C.	1719	19	33
STATISTICIANS	1733	215	261
PHYSICISTS	1843	24	114
CHEMISTS,EXCEPT BIOCHEMISTS	1845	6	69
ELECTRICAL ENGINEERING TECH.	3711	812	1306
ENGINEERING TECHS,N.E.C.	3719	57	251
ENGINEERING & RELATED TECHN.	37XX	25	51
PROGRAMMERS	397X	85	511
TECHNICAL WRITERS	398	1	2
SALES AGENT,BUSINESS SERVICE	4152	34	294
SALES REPRESENTATIVE, COMPUT	4242	47	422
SALES REPRESENTATIVE, CABLE	4369	85	425
SUPERVISORS INFORM CLERKS	4514	16	89
SECRETARIES,STENOS & TYPISTS	462X	39	33
BOOKEEPING & ACCNT CLERKS	4712	2	5
STILL,CLARIFER & PRECIP.OPS	7676	15	40
ASSEMBLERS	772X	4	270
PRODUCTION INSPECTORS,CHECKE	782X	11	92
*** TOTAL ***		3312	10346

Sources of Trained Personnel for the Future

Respondents were asked to identify sources of employees projected to be hired during the next 1-3 years. 80% (13,454) of

the projected 16,946 total employees projected to be needed during the next 1-3 years were represented in the data. Firms projected that 1,021 employees would be trained on the job, 179 through classroom training, 2,483 would be hired as graduates from vocational education schools, 1,495 would be hired as four year college graduates, 4,764 would be hired from other firms and 3,512 would be hired from out of state. It should be noted that firms consistently indicated an increased need for employees during the next 1-3 years due to growth. The firms interviewed also indicated they plan to obtain these workers from other in-state firms. The supply of experienced technical workers supports this premise only if massive lay-offs are experienced by large high tech firms, thus freeing up employees for other firms.

V. HIGH TECHNOLOGY TRAINING COURSE AVAILABILITY

Table 3 shows the number of completers of Colorado public and private post secondary and public secondary vocational education programs during the 1982-83 school year. The full report presents completer data in separate tables on public post secondary, private post secondary, and public secondary programs.

TABLE 3

SUPPLY OF TRAINED WORKERS FROM PUBLIC AND PRIVATE POST SECONDARY AND PUBLIC SECONDARY PROGRAMS RELATED TO EXPRESSED HIGH TECHNOLOGY FIRM NEEDS 1982-83 SCHOOL YEAR COMPLETERS

CIP CODE	PROGRAM TITLE	PUBLIC POST SECONDARY	PRIVATE POST SECONDARY	SECONDARY
08.0706	Sales	7	0	0
08.0799	General Marketing, Other	13	0	0
06.0401	Business Admin & Mgt.	35	137	0
06.0499	Business Admin, Gen.	3	83	0
07.0101	Accounting, Bkpg. & Other	170	280	368
07.0199	Accounting & Bkpg. Related	0	4	0
07.0305	Business Data Programming	62	147	15
07.0601	Secretarial & Related	168	0	3282
07.0608	Word Processing	47	276	0
07.0701	Typing,Gen. Office & Related	173	42	1221
07.0702	Clerk Typist	4	4	0
15.0202	Drafting & Design Technology	85	167	151
48.0101	Drafting, General	2	0	0
15.0302	Electrical Technology	0	29	7
15.0303	Electronic Technology	407	362	78
15.0402	Computer Servicing Technology	5	0	0
15.0403	Electromechanical Technology	0	29	7
15.0404	Instrumentation Technology	13	0	4
15.9999	Engineering & Eng. Related Tech	0	0	14
15.0805	Mechanical Design Technology	12	0	0
47.0199	Communications Electronics	25	87	32
47.0101	Communications Elect. Othr	8	0	0
47.0199	Elec.& Elect. Equip. Repair	123	16	18
48.0503	Machine Tool Oper/Machine Shp.	12	0	154

SOURCE: VE-135 Report, Programs for FY 1982-83

Data from this study indicates a greater need for technical and support personnel than is currently provided through public or private vocational education programs. This may account for firms going out of state for recruiting new employees.

VI. HIGH TECHNOLOGY FIRM RECOMMENDATIONS

Basic Skills Training

A large percentage of firms surveyed volunteered information on basic skills requirements. Employees must have adequate math,

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communication and, for technical jobs, science skills. High tech firms do not want to be responsible for training in basic skills. Currently, entry level employees are not exhibiting an adequate level of competency in these areas.

Technical Skills

Firms interviewed reported that basic technical skills of vocationally trained workers were for the most part acceptable. There appears to be a difference in content and levels of expertise of graduates of different vocational education programs. Most firms plan on training for skills and operational procedures specific to the industry. In order to maintain updated training programs, vocational education programs are strongly encouraged to develop close relationships with industry.

Job Skills

A strong concern indicated by firms was that entry level employees have good job skills. These skills may include interpersonal and human relations skills, active listening skills, ability to deal with managerial heirarchy, punctuality, meeting employer expectations, skills development for upward mobility, and how to keep a job. Successful employment in high tech industry is contingent on not only technical skills but "world of work" skills, as well. Development of training programs which address industry preparedness was highly recommended by the firms.

Coop and Internships

Technician through Engineering programs are strongly urged to develop cooperative and internship programs. The graduates of these work experiences are considered to be much better prepared

for work in industry. The length of time required for graduates with internship or cooperative experience to be fully capable of their job functions is much less than those who have not gone through these programs. Because time is costly to industry, a chance to train a potential employee, who is still in school, is attractive. Secondly, the company is much more likely to hire an entry level employee with whom they are familiar.

Clerical Programs

Results of the study show a greater demand for administrative support personnel than there is a supply. Secondly, firms identified that training programs should include demonstrated basic skills competencies, basic clerical skills, organizational-job skills, word processing and computer literacy. High tech firms want competent administrative support personnel and they are willing to compensate these employees well for their qualifications.

Industrial Process Control

A technical training area needed by high tech industry is in the area of process control. This training includes, materials management, supervision of manufacturing or assembly processes, flow of products and contract committment control.

Cable Technology

Interviews with cable companies indicated a growing need for cable technicians. Currently, Colorado does not provide public vocational education training in this area. Firms are using outside private training sources or correspondence courses in a 36 month training effort. Development of a public training

program in cable technology is of strong interest to the cable industry.

Computer Literacy

An operational understanding of computers is considered essential to technical skills training. This may not include programming knowledge, but does require skills needed for computer program applications.

CAD/CAM

Computer assisted design and computer aided manufacturing is considered by industry to be the singlemost important technical training program to develop. Machinists, drafters and related occupations will integrate CAD/CAM into production procedures.

Telecommunications

Training in fiber optics, switching and other areas utilized by the telecommunication industry is important not only to new employment, but in retraining the existing workforce for continued employment.

Robotics

Projections show that by 1987, 15% of all assembly systems will use robot technology. Technicians will need to be able to program the system, supervise the automated assembly process and provide maintenance.

Bio-medical Technology

Increased use of sophisticated electronic equipment in the biotech and medical technology fields is seeing the emergence of a new occupation. Varying levels of medical diagnostic and laboratory techniques will be combined with a knowledge of electronic equipment useage and maintenance to form the duties of

the Biomedical Technologist.

Entrepreneurship Training

Colorado encourages growth of small, entrepreneurial efforts. Spin-offs from existing high tech firms often grow into sizable businesses. Business training aimed at small high tech business start-up has been identified as important to the success and future of the many new companies.

Aerospace

Projections for future employment in the aerospace field are sizable. Computerized precision machining (CAM) and design (CAD) combined with microelectronics and new technical skills will be essential to the development of the industry. Colorado should be planning for these training and employment needs.

VII. SUGGESTED DEVELOPMENT ACTIONS

The following actions represent essential elements of a Colorado strategy to deal with the overwhelming challenge of high technology training during the remainder of the 1980's and into the 1990's. These actions are discussed in greater detail in the full final report.

* Identify and establish high tech training centers.

* Provide individualized assessment and basic skills building opportunities using CAI and CMI stategies.

* Establish consistency between similar training programs thoughout the state.

* Establish high quality internship and coop job experiences coordinated by motivated and specially trained professionals at the prototype high tech centers of excellence.

Finally, Colorado must approach technical training with the same level of committment and effort with which it meets needs of

research. Innovations in the development of solid, affordable technical training is essential to continued development and maintainance of high tech industry in Colorado.

Allocation of State funds for development of state-of-the-art vocational training systems is of equal importance as the funding of research and development institutes. The immediate and long-term well-being of high tech industry revolves directly around a well trained workforce which is capable of quality production. The State must address this issue quickly and in an efficient and effective manner. It is appropriate for vocational education to assume a sense of urgency regarding its plans for development of high tech training.

The Colorado Advanced Technology Institute (CATI) has not addressed vocational training as a priority issue. Instead, CATI has geared its efforts toward research and development in cooperation with universities. Based on the imperative nature of high tech vocational training needs, the State is strongly encouraged to create a specialized vehicle to meet this need.

The development of a technological training network utilizing telecommunications, and state-of-the-art instructional approaches is a compelling course of action. A private public/partnership could be created which incorporates the capacity of the current SBCCOE system, the newly implemented high tech centers and industry.

A technology transfer center could link learners with training curriculum. This network, combined with new instructional technology, such as video disc, computer-assisted (CAI) and computer-managed (CMI) instruction, has the potential

to deal with current state educational delivery problems. Instructional technology, while certainly not a panacea for poor curriculum, can meet the challenge being presented to Colorado by high tech industries. To accept industry's challenge is to prepare Coloradans for the work force of the 1990's and the year 2,000.

APPENDIX A

High Technology Standard Industrial Codes (SIC's) in Colorado

2819	Industrial inorganic chemicals, NEC
2833	Medicinals and botanicals
2834	Pharmaceutical preparations
2869	Industrial organic chemicals, NEC
3573	Electronic computing equipment
3574	Calculating and accounting machines
3579	Office machines, NEC
3612	Transformers
3622	Industrial Controls
3641	Electric lamps
3643	Current-carrying wiring devices
3651	Radio and TV receiving sets
3661	Telephone and telegraph apparatus
3662	Radio and TV communication equipment
3671	Electron tubes, receiving type
3673	Electron tubes, transmitting
3674	Semiconductors and related devices
3675	Electronic capacitors
3676	Electronic resistors
3677	Electronic components, NEC
3693	X-ray apparatus and tubes
3721	Aircraft
3724	Aircraft
3728	Aircraft engines and engine parts
3761	Guided missles and space vehicles
3764	Space propulsion units and parts
3769	Space vehicle equipment, NEC
3811	Engineering and scientific instruments
3822	Environmental controls
3823	Process control instruments
3824	Fluid meters and counting devices
3825	Instruments to measure electricity
3829	Measuring and controlling devices, NEC
3832	Optical instruments and lenses
3841	Surgical and medical instruments
3842	Surgical applicances and supplies
3843	Dental equipment and supplies
3851	Opthalmic goods
3861	Photographic equipment and supplies
4811	Telephone communication
4833	Television broadcasing
4899	Communication services, NEC
7372	Computer programming and software
7379	Computer related services, NEC
7391	Research and development laboratories

APPENDIX B

SBCCDE/GOVERNOR'S OFFICE - HIGH TECHNOLOGY ASSESSMENT

SIC:_____
INTERVIEWER:_____
ID#:_____

NAME OF RESPONDENT:_____ POSITION:_____

COMPANY NAME:_____ PARENT ORGANIZATION:_____

ADDRESS:_____ PHONE:_____

A. Employment Data and Educational Needs

1. Please describe the principle product or service that your company produces.

2. What facet of your operation would place it in the "high technology" category?

3. a. How many full-time employees do you have?_____

b. Can you tell me the approximate % or numbers of personnel by level of education?

PHD.'s_____ MBA's_____ MS/MA_____ BS/BA_____ AA/AS_____ Certified Workers_____(provide examples)

c. What is the approximate % or numbers of personnel by functional job area?

Professionals___%(#_____) Skilled/Technicians___%(#_____) Semi-Skilled/Assemblers___%(#_____) Unskilled___%(#___)

Clerical/Support____%(#____)

Other(name)____%(#_____)_____

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4. a. What job categories are included in your firm? (Voc.ed., Colleges and Universities) #'s

b. What kind of high technology positions have you hired in the last 6 months? (Voc.ed and Universities) # s

c. What kind of high technology positions will be critically needed by your firm in the next 1 to 3 years? #'s

a. Job Categories	b. Hired last 6 months		c. Next 1 -3 Years	
	Voc.Ed. #	4-Year #	Voc.Ed. #	4-Year #
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				

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5. a. Where do you plan to obtain the skills needed by your firm during the next 1 to 3 years?

Job Category	On-the-Job #	Classroom #	Voc.Ed. #	CO colleges #	Other firm #	Out-of-state #
1.						
2.						
3.						
4.						
5.						

b. Will you retrain? If so, how?

1.						
2.						
3.						
4.						
5.						

c. What training program(s) would you recommend that the State Board for Vocational Education initiate which would provide trained workers needed by your firm?

d. What other actions can Colorado's educational institutions take to better serve your firm's needs?

Voc.Ed.

Colleges & Universities

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B. General Information

1. Please briefly describe the history of your company including size (number of employees), date of start-up, location, and financing.

---

2. I will name 6 stages of growth for an advanced technology firm. Please tell me at which stage your company is and describe its financing package:

a. **INVENTION:** (e.g., The development of new product or service ideas: pooling of resources to develop and test product or service application).
financing:_____

---

b. **PROTOTYPE DEVELOPMENT:** (e.g., Initial design and testing of products or services -- development of model, preliminary lay-out Conducting feasibility study of estimated resources required to market product/service).
financing:_____

---

c. **COMMERCIAL STARTUP:** (e.g., Securing capital to manfacture and market products/services. Formal dedication of labor, equipment, and facilities to products/services line).
financing:_____

---

d. **EARLY GROWTH:** (e.g., Approaching maximum capacity of existing operation. Acquiring more professional talent -- both technical and managerial, more formal organizational structure, and possible expansion into new product/service lines).
financing:_____

---ANNUAL BREAKEVEN POINT---

e. **ACCELERATING GROWTH:** (e.g., Additional expansion realized: increased marketing of products/services. Possible merger or consolidation with another firm.
financing:_____

---CUMULATIVE BREAKEVEN POINT---

4. **SUSTAINED GROWTH:** Stable return and after-tax net profit. Solid capital base and access to financing arrangements. Increase product availability and service).
financing:_____

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3. Are all your facilities located at one site or multiple sites? (List)

_____

_____

4. Do you plan to expand or relocate any or all of your facilities within the next two years?
YES_____ NO_____ MAYBE_____

Reason: Research_____ Product Development_____ Assembly_____ Manufacturing_____ Other_____

5. What were your companies total revenues in FY 1983? $_____?

6. Did your revenues increase or decrease over FY 1982? _____% $_____annual?

7. What % of your total operating budget is devoted to R&D activities? _____%

8. Where is your product/service area?

a. Within Colorado_____% b. Outside Colorado_____% c. International_____% (What countries?_____)

9. Are any of your processes or products patented? Which ones?_____)

10. How would you characterize the nature of your R&D processes?

a. In-House_____ or b. University_____ (If yes, answer 1-4)

1. Laboratory_____ 2. Data Base_____ 3. Library/Publications_____ 4. Professors/Consultants_____

11. Do you contract with any Colorado college, Voc.Ed. school, university or medical school?_____ if so, which ones?_____

_____

12. Do you contract out for any part of your processes?_____If yes, where?

Inside Colorado _____ Outside Colorado _____ International _____ What countries?_____

13. Who are your suppliers, what do they supply and where are they?

Inside Colorado_____ Outside Colorado_____ International_____

14. Do you have any other suggestions on how the State of Colorado could better support High Tech companies in Colorado?

_____

_____

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